Patent Claims

Graft polymer-modified polycarbonate moulding compositions containing 1. phosphorus compounds of the formula (I)

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in which

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R¹, R², R³ and R⁴ are mutually independently C₁-C₈ alkyl, optionally substituted by halogen, C₅-C₆ cycloalkyl, C₆-C₁₀ aryl or C₇-C₁₂ aralkyl, each optionally substituted by halogen and/or alkyl,

n are mutually independently 0 or 1,

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are mutually independently 0, 1, 2, 3 or 4, q

N

is 0, 9 to 10,

R⁵ and R⁶ mutually independently mean C₁-C₄ alkyl or halogen,

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means C₁-C₇ alkylidene, C₁-C₇ alkylene, C₅-C₁₂ cycloalkylene, C₅-C₁₂ Y cycloalkylidene, -O-, -S-, -SO-, -SO₂- or -CO-,

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and fluorinated polyolefins in the form of a coagulated mixture or as a precompound.

a coagulated mixture with at least one component selected from among graft polymer, copolymer and polycarbonate, wherein the fluorinated polyolefins are mixed as an emulsion with at least one emulsion of the stated components and then coagulated,

or

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as a precompound with at least one component selected from among graft polymer, copolymer and polycarbonate, wherein the fluorinated polyolefins are mixed as a powder with a powder or pellets of at least one of the stated components and melt-compounded.

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3. Moulding compositions according to claim 1, containing 0.5 to 20 parts by weight of phosphorus compound of the formula (I) or mixtures thereof.

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Moulding compositions according to claims 1 to 3, containing 0.01 to 3 parts by weight of fluorinated polyolefin in the form of a coagulated mixture or as a precompound.

5. Moulding compositions according to claim 4, containing 0.05 to 2 parts by weight of fluorinated polyolefin.

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Moulding compositions according to claim 1, containing

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40 to 99 parts by weight of aromatic polycarbonate and/or polyester carbonate

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B) 0.5 to 60 parts by weight of graft polymer of

C)

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B.1) 5 to 95 wt.% of one or more vinyl monomers on

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B.2) 95 to 5 wt.% of one or more grafting backbones having a glass transition temperature of <10°C,

. .

from the group comprising vinyl (co)polymers and polyalkylene verephthalates,

0 to 45 parts by weight of at least one thermoplastic polymer selected

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D) 0.5 to 20 parts by weight of a phosphorus compound of the formula
(I)

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$$R^{1} = (O)_{n} = \begin{pmatrix} (R^{5})_{q} & (R^{6})_{q} & O \\ (O)_{n} & (O$$

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in which R¹ to R⁶, Y, N, and q have the meaning stated in claim 1,

E) 0.01 to 3 parts by weight of fluorinated polyolefins according to claim 1.

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7.

Moulding compositions according to one of the preceding claims, wherein N in the formula (I) denotes an average value of 0.95 to 5.

8. Moulding compositions according to one of the preceding claims, wherein N in the formula (I) denotes an average value of 1 to 3.

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Moulding compositions according to one of the preceding claims, containing fluorinated polyolefin or polyolefin mixture

as a coagulated mixture with at least one of components A to C, wherein the fluorinated polyolefin E or polyolefin mixture is mixed as an emulsion with at least one emulsion of components A to C and then coagulated,

or

- as a precompound with at least one of components A to C, wherein the fluorinated polyolefins E are mixed as a powder with a powder or pellets of at least one of components A to C and melt-compounded.
- 10. Moulding compositions according to one of the preceding claims containing one or more graft polymers of
 - B.1 5 to 95 wt.% of at least one vinyl monomer on .

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- B.2 95 to 5 wt.% of one or more grafting backbones having glass transition temperatures of < 10°C.
- 11. Moulding compositions according to claim 10, containing as the vinyl monomers B.1 mixtures of

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- B.1.1 50 to 99 parts by weight of vinyl aromatic and/or ring-substituted vinyl aromatics and/or (meth)acrylic acid (C₁-C₈)-alkyl esters and
- B.1.2 1 to 50 parts by weight of vinyl cyanides and/or (meth)acrylic acid (C₁-C₈)-alkyl esters and/or derivatives of unsaturated carboxylic acids.

Moulding compositions according to one of the preceding claims, containing à diene rubber, acrylate rubber, silicone rubber or ethylene/propylene/diene rubber or mixtures thereof as the grafting backbone B.2.

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Moulding compositions according to one of the preceding claims, wherein Y 13. in the formula (I) denotes isopropylidene or methylene.

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Moulding compositions according to claim 13, wherein Y in the formula (I) 14. denotes isopropylidene.

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Moulding compositions according to one of the preceding claims, containing vinyl (co)polymers of at least one monomer from the group comprising vinyl axomatics, vinyl cyanides, (meth)acrylic acid (C₁-C₈)-alkyl esters, unsaturated carboxylic acids, as well as derivatives (such as anhydrides and imides) of unsaturated carboxylic acids.

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Moulding compositions according to one of the preceding claims, containing 16. at least one addition from the group comprising stabilisers, pigments, mould release agents, flow auxiliaries and/or antistatic agents, fillers and reinforcing materials.

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Use of the moulding compositions according to one of the preceding claims 17. for the production of mouldings.

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Mouldings obtainable from moulding compositions according to one of the 18. preceding claims.